

# WereldWijde WiskundeWedstrijd W4Kangoeroe

THURSDAY MARCH  
21TH 2019

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

Good luck and most of  
all have fun.

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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 March 31<sup>th</sup>



solutions will be posted on the website about April 22<sup>th</sup>

wizKID  
group 5 & 6 primary school



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)



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



[www.hp-prime.nl](http://www.hp-prime.nl)



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



[www.mathplay.eu](http://www.mathplay.eu)



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



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



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

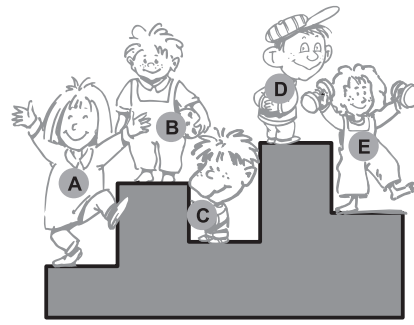


[www.museumboerhaave.nl](http://www.museumboerhaave.nl)



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

1. The higher the step a child is standing on, the better the child has performed.



Who finishes third?

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

2. A circle stands for 1 and a bar stands for 5. This, for instance, is 8:



Which picture stands for 12?

- A.    B.    C.    D.    E.

3. Yesterday was Sunday.

What day is tomorrow?

- A. Monday      B. Tuesday      C. Wednesday      D. Thursday      E. Saturday

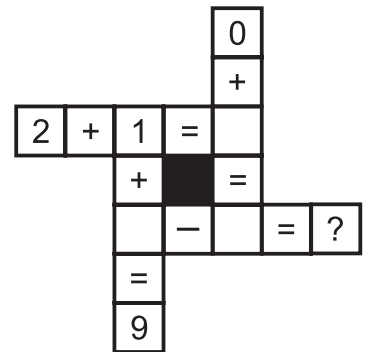
4. 3 people have been walking through the snow with muddy shoes.



In which order did they do this?

- A.    B.    C.    D.    E.

5. Which number belongs to the spot with a question mark?



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

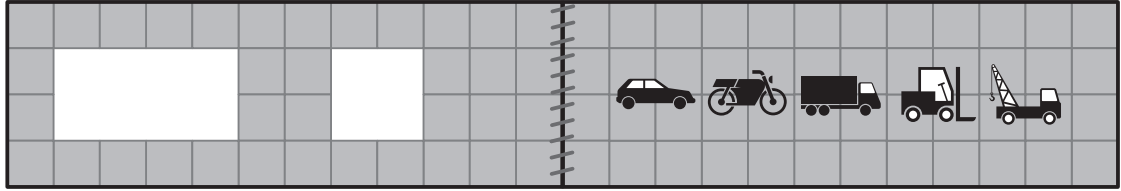
6. Ria is making shapes with connected sticks, see picture.



Which shape she cannot make with these sticks?

- A.    B.    C.    D.    E.

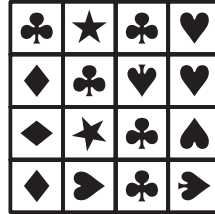
7. There are 2 holes in the cover of the book. When the book is open, it looks like this:



Which pictures does *Olaf* see if he looks through the holes when the book is closed?

- A.      B.      C.
- D.      E.

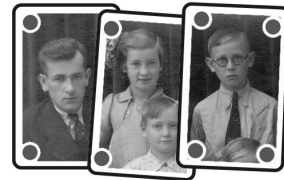
8. *Karin* cuts a piece like this from this paper:



Which piece could she get?

- A.      B.      C.      D.      E.

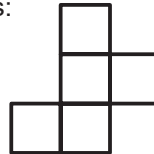
9. *Linda* put up 3 photos on the board with 8 magnets. *Peter* wants to put up 7 photos the same way.



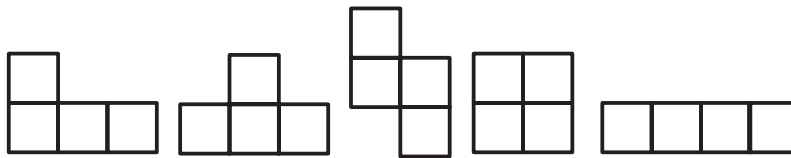
How many magnets does he need?

- A. 14      B. 16      C. 18      D. 22      E. 26

10. *Dennis* has a lot of stickers that look like this:



He wants to use them to make the following 5 shapes.

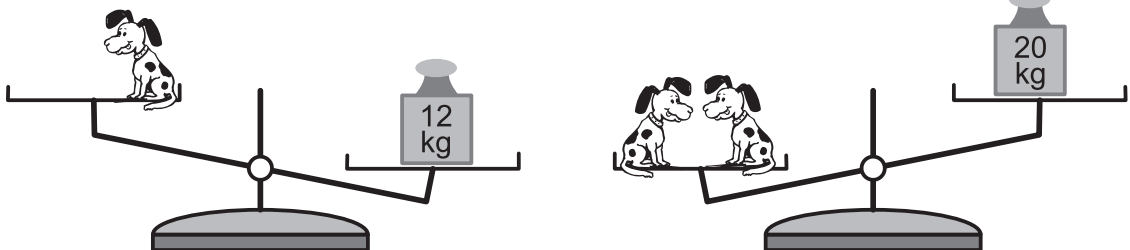


That is why *Dennis* cuts 1 box from every sticker.

How many of the shapes above can he make?

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

11. How much does 1 dog weigh?



- A. 7 kg      B. 8 kg      C. 9 kg      D. 10 kg      E. 11 kg

- 12.** Sara has 16 blue marbles. She can trade marbles in 2 ways:  
 3 blue marbles for 1 red marble  
 2 red marbles for 5 green marbles

What is the largest number of green marbles she can get?

- A.** 5                      **B.** 10                      **C.** 13                      **D.** 15                      **E.** 20

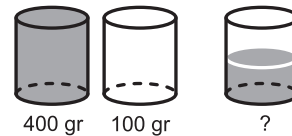
- 13.** Steven wants to write each of the digits 2, 0, 1 and 9 in exactly 1 box of the sum.

$$\square \square + \square \square = ?$$

What is the largest possible answer of the sum that he can get?

- A.** 39                      **B.** 102                      **C.** 111                      **D.** 921                      **E.** 2019

- 14.** A full glass of water weighs 400 grams.  
 An empty glass weighs 100 grams.



How many grams does a half-full glass of water weigh?

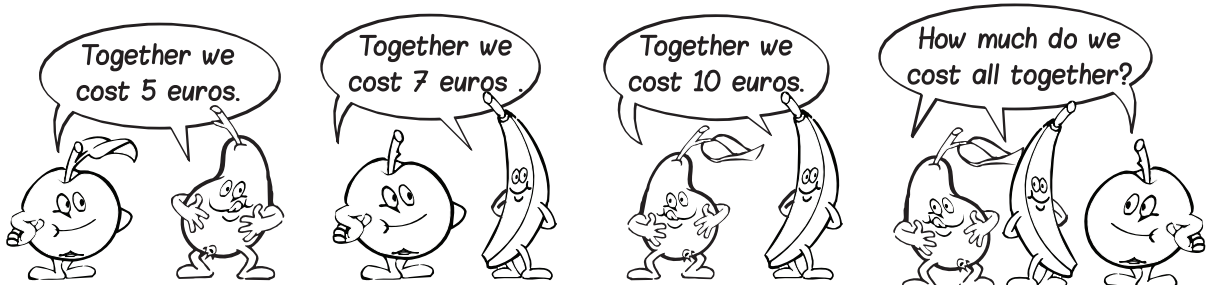
- A.** 150                      **B.** 200                      **C.** 225                      **D.** 250                      **E.** 300

- 15.** In a park are 15 animals: cows, cats and kangaroos.  
 Exactly 10 animals are not cows.  
 Exactly 8 animals are not cats.

How many kangaroos are there in the park?

- A.** 2                      **B.** 3                      **C.** 4                      **D.** 10                      **E.** 18

- 16.**



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

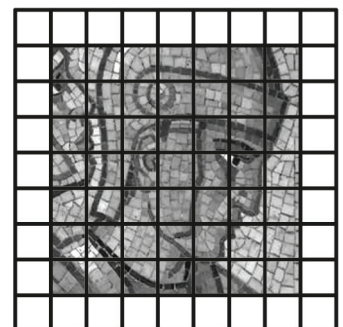
- 17.** Each shape is another number.  
 The sum of the 3 numbers in a row is shown next to the row.

○	★	♥	15
○	○	○	12
★	♥	♥	16

Which number is the ★ ?

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

- 18.** Anna makes a mosaic of 7 by 7 tiles.  
 She lays a border of 32 white tiles around the mosaic, see figure.



How many white tiles are needed for a border just like that around a mosaic of 10 by 10?

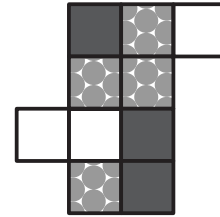
- A.** 36                      **B.** 40                      **C.** 44                      **D.** 48                      **E.** 52

19. The pages of a book are numbered 1, 2, 3, 4, 5 and so on.  
The digit 5 appears exactly 16 times.

What is the largest number of pages this book could have?

- A. 49                      B. 64                      C. 66                      D. 74                      E. 80

20. *Ibrahim* folds a box of 2 by 1 by 1 out of this piece of cardboard:



Which box will *Ibrahim* get?

- A. B. C. D. E.

21. *Fatima* has 9 little triangles: 3 dotted, 3 striped and 3 black ones.  
She wants to make a larger triangle by placing the small triangles next to each other.  
Triangles that have a common edge, cannot look the same.  
*Fatima* places some of the smaller triangles as in the figure.



Which is correct when *Fatima* is ready?

- A. 1 is black and 2 is dotted                      B. 1 is striped and 3 is dotted  
C. 1 and 3 are striped                              D. 1 and 3 are dotted  
E. 5 is dotted and 2 is striped

22. 1 of the 5 children *Alex*, *Bart*, *Cadir*, *Dewi* and *Edwin* has eaten a cookie.

*Alex* says: "I did not eat a cookie."

*Bart* says: "I have eaten the cookie."

*Cadir* says: "*Edwin* did not eat a cookie."

*Dewi* says: "I did not eat a cookie."

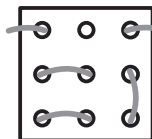
*Edwin* says: "*Alex* has eaten the cookie."

Exactly 1 child lies.

Who has eaten the cookie?

- A. *Alex*                      B. *Bart*                      C. *Cadir*                      D. *Dewi*                      E. *Edwin*

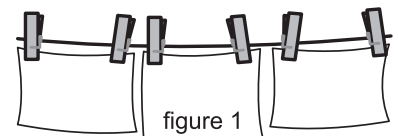
23. *Juri* just finished threading a lace through the holes in a board.



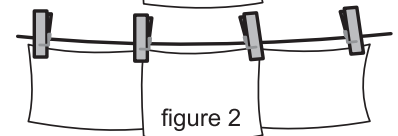
What could the other side of this board look like?

- A. B. C. D. E.

24. *Emiel* is hanging out the laundry with 2 pegs for every towel, see figure 1:



After some time he discovers that he does not have enough pegs.  
From then on he hangs out the towels as shown in figure 2:



In the end 35 towels are hanging and 58 pegs have been used.

How many towels did *Emiel* hang out in the way shown in figure 1?

- A. 12                      B. 13                      C. 21                      D. 22                      E. 23