

## Good luck and most of all have fun.

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calculators are not allowed

Only a pencel, an eraser and scribbling paper are allowed

answers will be posted on the website March 26th

you may use 50 minutes
results and prizes will arrive at school in May
solutions will be posted on the website April 22th

enksport
2](iven
www.zwijsen.nl

www.e-nemo.nlTexas
INSTRUMENTS
www.education.ti.com

www.smart.be

## Sanders:

www.sanderspuzzelboeken.nl
Schoolsupport
www.schoolsupport.nl
Math Plus
www.mathplus.nl

www.hp-prime.nl

EID Premiums www.idpremiums.n

www.ru.nl
 platform www.platformwiskunde.nl

1.


Which puzzle piece fits in between the 2 puzzle pieces above such that the sums are correct?
A. $=5$ -
B. $=3 \quad 4-2 C$
C. $=51+2 \boldsymbol{C}$
D.
$=4 \quad 5-3$ C
E. $=51+1$ C
2. John looks out of the window.

He sees half of all kangaroos in the park (see picture).

How many kangaroos are there in the park?

A. 12
B. 14
C. 16
D. 18
E. 20
3. 2 glass windows are partly painted black.

Both are being placed over a poster at the same time.


The pictures that are hidden behind a black square cannot be seen then.
Exactly 1 picture is still visible.
Which picture is that?
A.

B. $\sqrt{ } \sqrt{ }$
c.
D. $\square$
E.
4. A photo of footprints is turned upside down.


Which footprints are missing in the second picture?
A. $\subseteq$
B. AE
c.
D.
00:-
E. $\leftarrow$
5. Which number is hidden behind the panda?

A. 16
B. 18
C. 20
D. 24
E. 28
6. Fatima has accidentally broken the mirror to pieces.

How many pieces have exactly 4 sides?
A. 2
B. 3
C. 4
D. 5
E. 6
7. This is a table with additions.

Which number belongs in the box with the question mark?
A. 10
B. 11
C. 12
D. 13
E. 15
8. Alongside you see a necklace with 6 beads.


Which necklace is it?

B.

c.


E.

9. The picture shows the front of $A n$ 's house.

The rear of her house has 3 windows but no door.

What does An see when she looks at the rear of her house?

A.

B.

C.

D.

E.

10. 4 round sweets and 1 square sweet together cost as much as 3 square sweets:

## $\theta O 8+\theta O B+\theta O B+\theta O 8+\theta \square A=\theta \square A+\theta A+\theta \square A$

Which statement is certainly true then as well?
A. $O \square=1$ round and 1 square sweet are equally expensive
B. $\square \&=8+8+818$

D. $\mathcal{F}=\square \boldsymbol{\delta}+\square \mathcal{8} 1$ round sweet costs as much as 2 square sweets
E. $\square \boldsymbol{f}=\mathbb{8}+\infty 1$ square sweet costs as much as 2 round sweets
11. A shop sells balloons in packages of 5,10 or 25 .

Marius wants to buy exactly 70 balloons.
What is the smallest number of packages to do this?
A. 3
B. 4
C. 5
D. 6
E. 7
12. There is a swimming contest in the pool. First 13 children sign up. Then another 19 children do. How many more children have to sign up to be able to form 6 teams with an equal number of children?
A. 1
B. 2
C. 3
D. 4
E. 5
13. There are numbers in a table. Mary discovers a square of 2 boxes wide and 2 boxes high in which the total of all numbers is the largest.

| 1 | 2 | 1 | 3 |
| :--- | :--- | :--- | :--- |
| 4 | 1 | 1 | 2 |
| 1 | 7 | 3 | 2 |
| 2 | 1 | 3 | 1 |

What is that largest total?
E. 15
14. David wants to cook 5 dishes on 2 gas burners.

The cooking times he needs for the 5 dishes are:
40 minutes, 15 minutes, 35 minutes, 10 minutes, 45 minutes.
He can take a pot from the burner only if the dish is ready.
What is the shortest time in which he can cook all dishes?
A. 60 minutes
B. 70 minutes
C. 75 minutes
D. 80 minutes
E. 85 minutes
15. Bob has folded paper. Then he made 1 hole in the paper. Then he unfolded the paper. In the picture you see the result.

How did Bob fold the paper?

A.

B.

C.

D.

E.

16. Which number should go in the circle with the question mark?

A. 10
B. 11
C. 12
D. 13
E. 14
17. You see a building of blocks here and the plan of the same building.

The plan shows how many blocks are stacked on each other on that spot. Some ink has fallen on the plan.

What is the sum of all numbers under the ink?

A. 3
B. 4
C. 5
D. 6
E. 7
18. George trains at 5 o'clock in the afternoon.

The journey from his house to the bus stop takes 5 minutes.
The trip by bus takes 15 minutes. From the busstop to the field takes 5 minutes.
The bus leaves every 10 minutes. The first bus leaves at 7 am .
At what time does he have to leave home at the latest to be exactly in time?
A.

B.

c.

D.

E.

19. A small zoo has an elephant, a lion, a turtle and a giraffe.

Emina wants a tour through the zoo where she sees 2 animals. She does not want to start at the lion.


In how many different ways can she take a tour through the zoo?
A. 3
B. 7
C. 8
D. 9
E. 12
20. 4 brothers have eaten 11 cookies altogether. 1 of them has eaten exactly 3 cookies. Each of them has eaten at least 1 cookie. Everyone has eaten a different number. 3 of them have eaten exactly 9 cookies together.


How many cookies did the boy eat who has eaten the largest number of cookies?
A. 3
B. 4
C. 5
D. 6
E. 7
21. In some boxes of the figure were smileys.

In some other boxes Zenna has written how many smileys neighbour that box. 2 boxes are neighbours when they share a side.
After that Zenna has removed the smileys
How many smileys did Zenna remove?

A. 4
B. 5
C. 7
D. 8
E. 11
22. Mom has 10 bags of sweets.

Each bag contains a different number of sweets from 1 to 10 .
5 boys get 2 bags each.
Ahmed has 5 sweets, Bob has 7 sweets, Charles has 9 sweets and Douwe has 15 sweets.
How many sweets did Eran, the fifth boy, get?
A. 9
B. 11
C. 13
D. 17
E. 19
23. Kate has 4 flowers, 1 with 6 petals, 1 with 7,1 with 8 and 1 with 11 petals.

From 3 flowers Kate takes a petal.
She repeats this a number of times where she has to choose 3 flowers again and again.


What is the least number of petals that can remain?
A. 1
B. 2
C. 3
D. 4
E. 5
24. How long is the train?

A. 55 m
B. 115 m
C. 170 m
D. 220 m
E. 230 m

