KÄNGURU DER MATHEMATIK 2018
15. 3. 2018

Level: Felix, Grade: 1 – 2

Name:	
School:	
Class:	

Time: 60 min.
15 starting points
Each correct answer to questions 1. – 5.: 3 Points
Each correct answer to questions 6. – 10.: 4 Points
Each correct answer to questions 11. – 15.: 5 Points
Each question left unanswered: 0 Points
Each incorrect answer: ¼ of the points for this question are subtracted

Please write the letter (A, B, C, D, E) of the correct answer in the square under the question number (1 to 15). Write clearly and carefully!

1	2	3	4	5

6	7	8	9	10

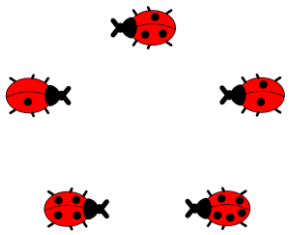
11	12	13	14	15

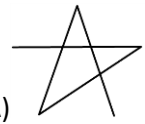
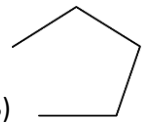
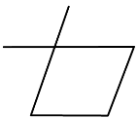
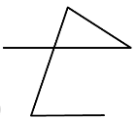
Information über den Känguruwettbewerb:
www.kaenguru.at

Känguru der Mathematik 2018
Level Felix (Grade 1 and 2)
Austria – 15. 3. 2018

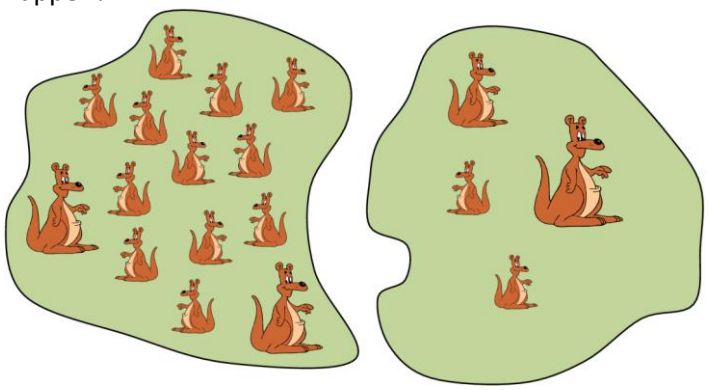
– 3 Point Examples –

1. Alice draws lines between the beetles. She starts with the beetle with the fewest points. Then she continues drawing to the beetle with one more point.
Which figure is formed?



(A)  (B)  (C)  (D)  (E) 

2. The same amount of kangaroos should be in both parks. How many kangaroos have to be moved from the left park to the right park for that to happen?

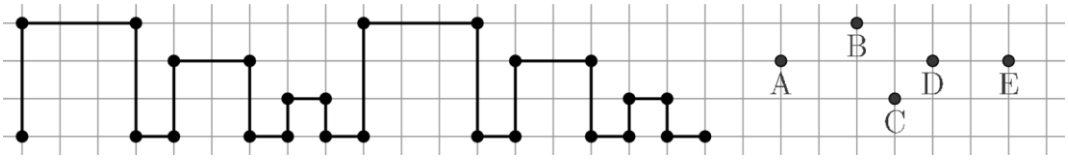


(A) 4 (B) 5 (C) 6 (D) 8 (E) 9

3. Which beetle has to fly away so that the remaining beetles have 20 dots altogether?

(A) Beetle with 4 points (B) Beetle with 7 points (C) Beetle with 5 points (D) Beetle with 6 points (E) no beetle

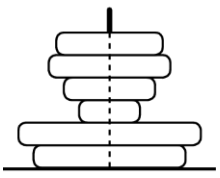
4. Peter has drawn this pattern:



He draws exactly the same pattern once more.
Which point is on his drawing?

(A) A (B) B (C) C (D) D (E) E

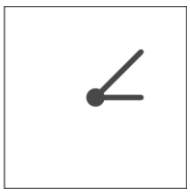
5. Theodor has built this tower made up of discs. He looks at the tower from above.
How many discs does he see?

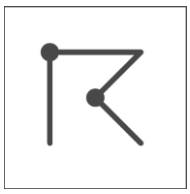


(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

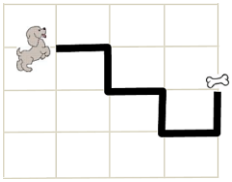
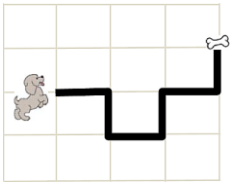
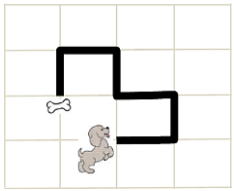
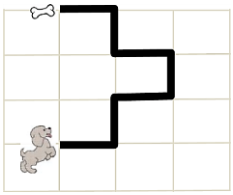
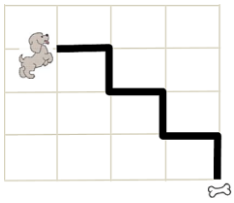
– 4 Point Examples –

6. This diagram shows two see-through sheets. You place the sheets on top of each other.
Which pattern do you get?

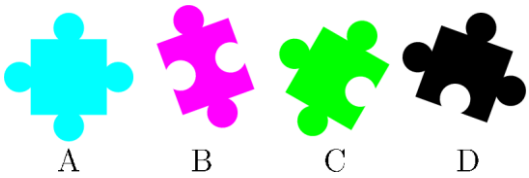



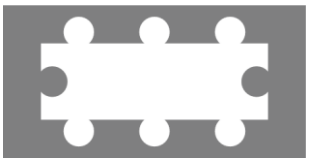
(A) 
(B) 
(C) 
(D) 
(E) 

7. In order to get to his bone, the dog has to follow the black line. In total he turns 3-times to the right and 2-times to the left.
Which path does he take?

(A) 
(B) 
(C) 
(D) 
(E) 

8. Lisa needs exactly 3 pieces to complete her jigsaw.
Which of the 4 pieces is left over?



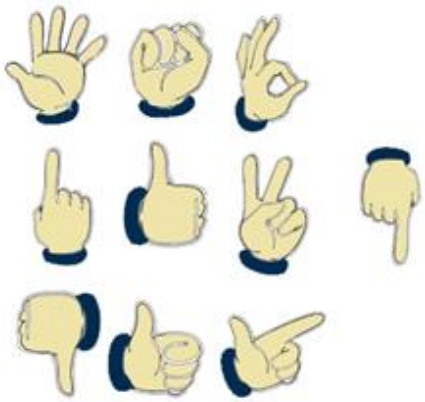


(A) A (B) B (C) C (D) D (E) C or D

9. Charles cuts a rope into 3 equally long pieces. Then he makes one knot in one of the pieces, 2 in the next and in the third piece 3 knots. Then he lays the three pieces down in a random order.
Which picture does he see?

(A) 
(B) 
(C) 
(D) 
(E) 

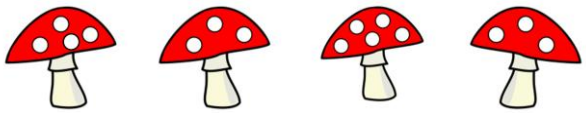
10. How many of the hands pictured show a right hand?



(A) 3 (B) 4 (C) 5 (D) 6 (E) 7

5 Point Examples

11. The number of spots on the fly agarics (toadstools) shows how many dwarfs fit under it. We can see one side of the fungi. The other side has the same amount of spots. When it rains 36 dwarfs are trying to hide under the fungi.
How many dwarfs get wet?

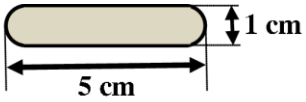


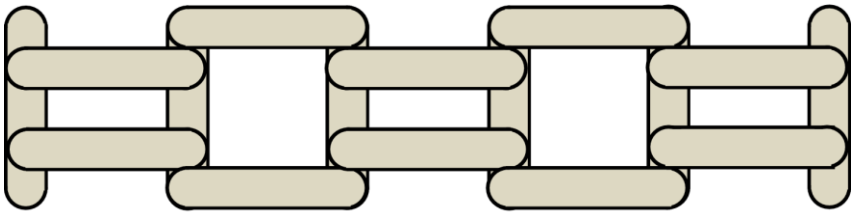
(A) 2 (B) 3 (C) 4 (D) 5 (E) 6

12. You are forming two-digit numbers using the digits 2, 0, 1 or 8. They have to be bigger than 10 and smaller than 25. Every number is made up of two different digits.
How many different numbers to you get?
(A) 4 (B) 5 (C) 6 (D) 7 (E) 8

13. Alice has 3 white, 2 black and 2 grey pieces of paper. First she cuts every piece of paper that is not black into two pieces. Then she halves every piece of paper that is not white.
How many pieces of paper does she obtain in total?
(A) 14 (B) 16 (C) 17 (D) 18 (E) 20

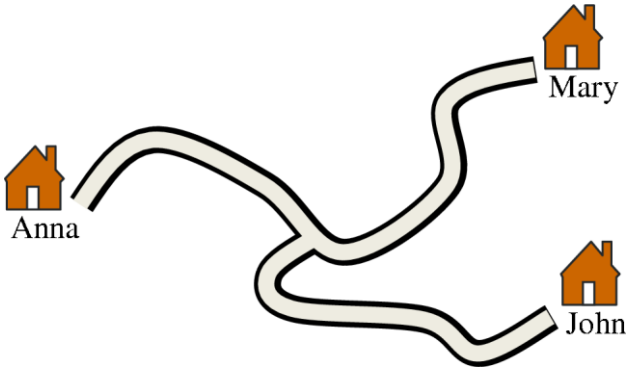
14. Susi makes this pattern using ice-lolly sticks. Each stick is 5 cm long and 1 cm wide.
How long is Susi's pattern?





(A) 20 cm (B) 21 cm (C) 22 cm (D) 23 cm (E) 25 cm

15. The road from Anna's to Mary's house is 16 km long. The road from Mary's to John's house is 20 km long. The road from the crossing to Mary's house is 9 km long.
How long is the road from Anna's to John's house?



(A) 7 km (B) 9 km (C) 11 km (D) 16 km (E) 18 km