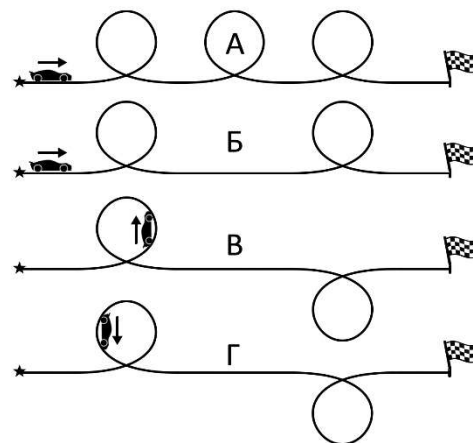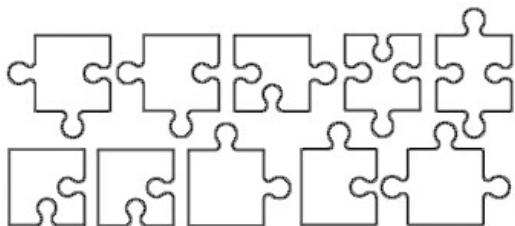*Middle division, 3rd grade.*

Read the tasks carefully. You can solve them in any order you like. Your answers and solutions must be written on the answer sheet.

Task 1. Mary has as many candy wrappers as Ann and Vance have combined. Ann has four fewer candy wrappers than Mary and Vance have combined. How many candy wrappers does Vance have?

Task 2. In a toy car race, 4 identical cars started at different times on different tracks. At 10:00, their positions were recorded by a video recorder (see the picture to the right). In what order will the cars finish if their speeds are the same and all circular turns are identical?
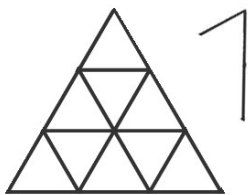

Task 3. Vanessa glued together 27 standard dice to form a large 3×3×3 cube, arranging them to have as few dots as possible on the outer sides. How many dots are there on the external sides of this large cube? (The dice are identical and standard; the sum of dots on opposite sides is 7).
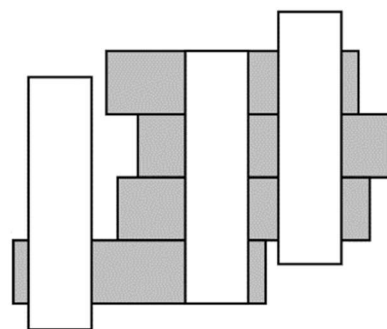

Task 4. Which one of the 10 puzzle pieces (in the picture) has to be removed so that a square can be formed from the remaining 9 pieces? Pieces can be rotated and flipped. The square's border must consist of straight segments

Task 5. Seven identical paper rectangles are placed on a table as shown: four gray rectangles horizontally (so they do not overlap each other) and three vertically. What is the area of the surface covered by a single layer of rectangles, if the area of one rectangle is 17 cm²?

Task 6. Vincent has 6 metal rods shaped like the digit "1". He needs to solder them together to form a triangular grid as shown in the picture. Show how to do this. All rods can be rotated and flipped in any way.

Task 7. Křemílek wants to drink 200 ml of fruit drink. He has a glass with a capacity of 300 ml containing 200 ml of water, a glass with a capacity of 200 ml containing 100 ml of juice, and an empty glass with a capacity of 200 ml. He can pour any liquid to fill any glass to its full capacity and mix thoroughly. How can he make 200 ml of fruit drink, if the drink is a mixture of water and juice where the amount of water is three times the amount of juice?

Task 8. Mom baked 7 pies and asked her 4 children not to eat them before lunch. But while mom was at the store, the children ate all the pies. When asked who ate them, the children said: Kevin: "Mike ate more than me." Mike: "George ate more than me." George: "Kevin ate more than me." Victor: "I ate the least." Mom knows that all the children ate pies, all lied, and no pie was shared. How many pies did each boy eat?