

Good practices LOGIC_802AB_EN

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Description of the problem / exercise: **Recognize the rule and continue!**

The following tasks belong to the topic of logic and logical thinking. There are different variations of a series of elements created according to a logical rule.

Task: recognize the rule and continue the series with one item/basic element.

Continue the series of basic elements based on the rule observed. Explain by what rule you continued the series!

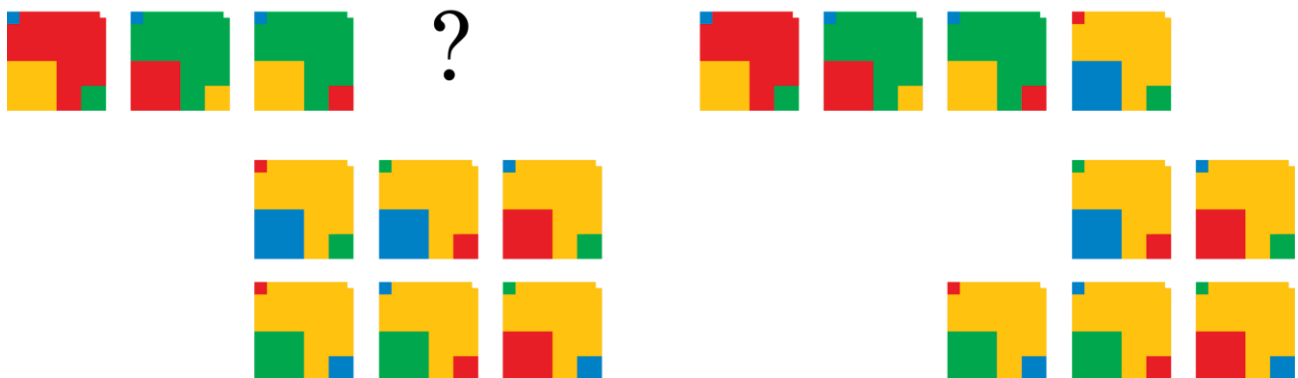
a) What will be the next item? Select it from the square basic elements



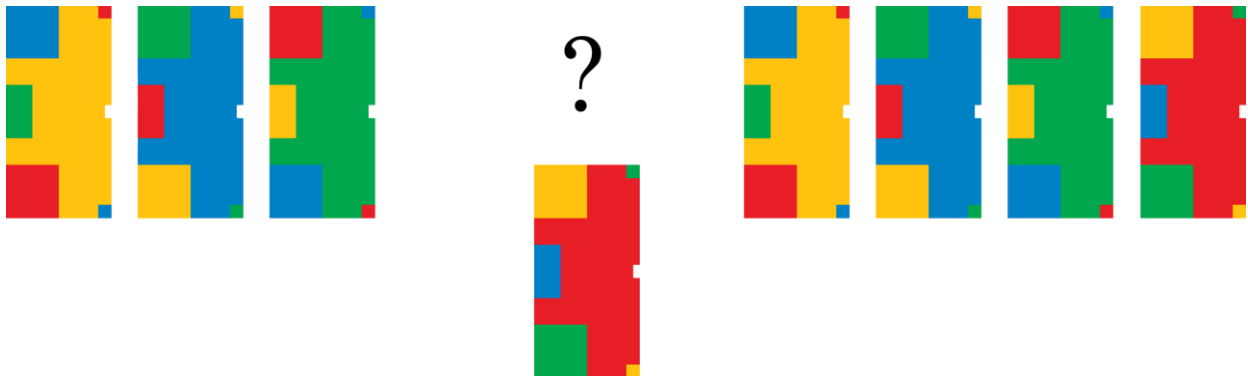
What will be the next item?



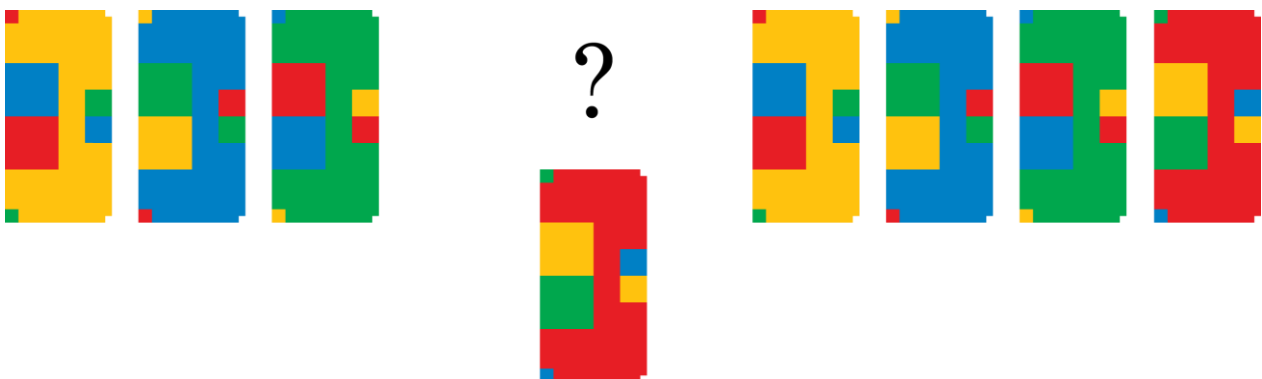
b) What will be the next item? The missing item must be selected from the specified six basic elements.



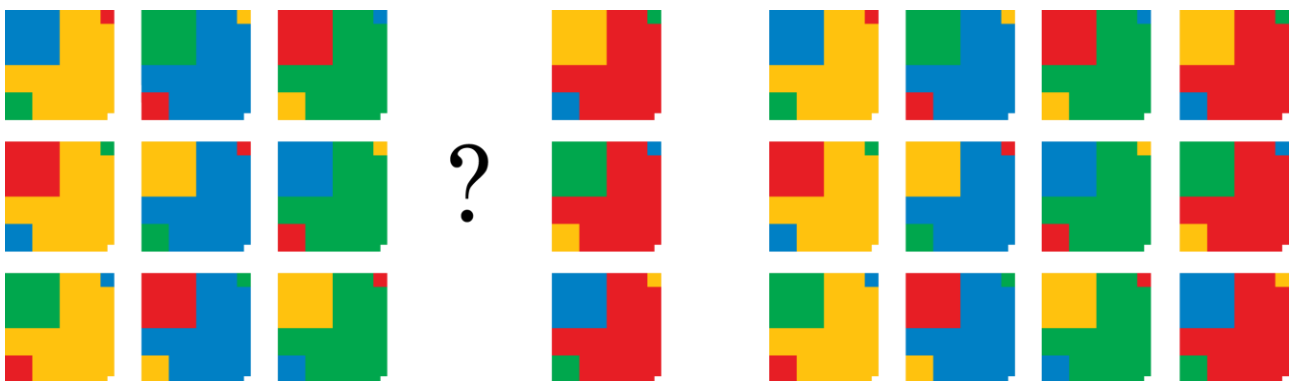
c) We have a series of shapes made up of two square basic elements. What will be the next item in the series? What rule did you apply to continue the series?



What will be the next item?



d) Continue the series of columns.



e) Work in pairs or small groups. One of the students makes a task in which he creates a series of elements according to a rule. The others shall find the rule and continue the series.

Depending on the task, the series can be continued:

- 1) with only one element fulfilling the conditions of the rule,
- 2) with several different elements, following the observed rule or rules,
- 3) with no matching element.

- *Why this exercise is good:* The task develops problem solving, logical thinking, and inductive thinking. Developing creativity: students work in pairs or groups to create sequences of elements for each other.
- *Level of teacher training:* Primary school
- *School subject(s):* Mathematics, logic
- *Comments:* Triangle and circle basic elements can be used for creating tasks in a similar way.